

## **NAHMS Swine '95: The Presence of *Salmonella* on U.S. Swine Operations**

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The NAHMS Swine '95 Baseline study involved two telephone interviews by NASS in June and December 1995. Farms from the top 16 swine states with a specified number of grower/finisher animals were eligible for participation in the NAHMS Swine '95 Grower/Finisher study. Two on-farm visits were made by APHIS:VS Veterinary Medical Officers (VMO's). The first visit was completed between July 17 and September 15, 1995. The second visit was completed between November 6, 1995 and January 19, 1996. In addition to completing two questionnaires, VMO's collected samples of blood, feces, and/or feed.

Up to 30 blood samples were taken per farm, no more than 15 samples coming from breeding animals, the remainder being collected from late finishers (within 30 days of being marketed). Up to 50 fecal samples were taken (from pens containing late finishers) on 160 farms resulting in the collection of 8000 fecal samples to be evaluated for *Salmonella*. Fecal samples were to be collected from no more than 10 pens. Five 100 g feed samples were taken from the ration to late finishers to be tested for *Salmonella*.

Fecal samples will be used to identify the presence of *Salmonella* in herds. Feed samples will be used to identify the presence of *Salmonella* in swine feed. Researchers at the NADC and NVSL will identify the group, serotype, and antimicrobial resistance patterns for *Salmonella* isolates.

The NAHMS Swine '95 study will help identify on-farm factors that may be useful in controlling the shedding of these organisms and reduce the risk of food borne illness due to the consumption of pork. It will also evaluate the associations between detection of *Salmonella* by blood, feces, and feed.

In addition to the above, fecal samples from the pilot study were used by Dr. Gbadamosi at Tuskegee for research on the development of PCR for *Salmonella*.